

TOP TIP

The web-based spreadsheet in Google Docs (<http://docs.google.com>) also includes the Workday function, which works in exactly the same way as we've shown here.

HOW TO... Manage deadlines in Excel

Meeting deadlines can be hard, but setting and altering them can be even harder. George McQueen explains to manage your time more efficiently with Excel

Working with a set of project deadlines can be tricky, particularly when you have to make changes and a deadline has a relationship with other dates. Many businesses also dictate that the deadline should not fall on a weekend or bank holiday.

Manually setting deadlines that recur or change regularly is time-consuming and subject to errors. However, if you use Excel to create your schedules you can apply its formatting and formula options to calculate changes accurately.

Excel's built-in Workday function allows you to set relational deadlines working up to or from a specific date, skipping weekends and bank holidays. It also makes it easy to produce the same relational deadlines for different sets of dates. Here, we use a set of deadlines to produce 12 issues of a monthly magazine.

1 Open Excel and input the tasks that need completing. Ensure that each task has a consistent relationship, in terms of time, either with a specific date or other deadlines in the project. Decide on a deadline for one of the tasks and type it in the cell beneath that task. This date can be for the start, completion (as in our example) or a task in the middle of the project.

To obtain meaningful dates, format the cells with a date format. Highlight the cells that will contain dates, go to the Format menu and choose Cells. A dialog box appears. Choose the format you wish to apply to the dates. We have chosen a Custom option, allowing the day of the week to appear alongside the date. This ensures that our system for avoiding weekends is working correctly.

2 For the deadline system to work, you need the Analysis Toolpak to be activated before using the Workday function. The Analysis Toolpak can be found under Tools, Add Ins. Tick the Analysis Toolpak option, then click OK.

If you receive a #VALUE! error on an existing Excel document that uses the Workday Function, check that the Analysis Toolpak is activated.

3 The Workday function will now work. Click in a cell on the first row where you want a deadline date to appear. We want this cell to display a date that has been calculated from another deadline.

Type =workday(in the formula bar, then click in the cell that contains the existing deadline. Add a comma followed by the number of days in the schedule by which the dates differ. For example, this date offset could be one working day. Close the brackets.

If the deadline date is one working day prior to the relational date, use a negative number. In our example it is, so we've used -1. If the deadline date is one working day after the relational date, it should be a positive number. The text in the formula bar will now read =workday(F2,-1) or similar.

Click OK to produce the deadline date within the active cell.

4 So far, the formula allows you to schedule dates that do not fall on weekends. However, it will not work around bank holidays. To avoid these, you need to tell the formula when the bank holidays occur by creating a table of all relevant dates within the spreadsheet. You

can also add other non-working days, such as periods when the business is closed or any date on which you do not want deadlines occurring.

This table can be created on a different area of the spreadsheet, such as a second worksheet, to keep things tidy. Separating it also means that it will not be visible when printing the deadlines on the first worksheet.

5 The formula can now link to these holiday dates and avoid them when creating deadlines. In the formula bar, after the date offset value, type a comma. Left-click in the first cell of the column that contains the holiday dates. Hold the mouse button down and drag the cursor through all the holiday date cells. Release the mouse button and close the brackets in the formula bar. The text in the formula bar should now read =workday(F2,-1,F16:F20).

Fill the first row with deadlines in a similar way, changing the date offset as necessary.

6 You can now complete the schedule for the rest of the year. Go to the column with your deadlines and fill out the dates for the year. Highlight the top row, which has the deadline dates visible within each cell, and release the mouse button. Move your cursor over the bottom right-hand corner of the far-right highlighted cell until a '+' sign appears. Drag the '+' down the column for all instances of the project. You should now have a complete annual schedule with appropriate dates for each month.

Accurate deadlines can now be produced each time this project is carried out, throughout the year or in subsequent years. **CS**

